Can daily internet use time screen for problematic internet use among college students? A receiver operator characteristic curve-based multi-country study

# Details

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## Sample

A total of 2643 participants were included for analysis in this study. The mean age of study sample was 21.37 years (Standard deviation:
2.63), with 223 study participants (8.4 %) identified as having PIU based on the GPIUS2 T-score of ≥ 65.

## Implications For Parents About

## Implications For Educators About

Other

## Implications For Stakeholders About

* Researchers
* Healthcare
* Other

## Other Stakeholder Implication

clinical implications in planning both screening and counselling strategies for PIU

# Abstract

Background and objective: The current article explored the possibility of using daily internet use time as an indicator for problematic internet use (PIU) among college/ university students based on observations from a multi-centric, multi-country study conducted across eight different countries. Additionally, the current article explored whether daily night time sleep and physical activity can serve as possible indicators of PIU.
Methods: The present article presents the findings from analysis of information collected from 2643 college/university students from eight countries. Area under the ROC curve (AUC) was calculated to compare the predictive performance of three different indicator variables in the study participants to determine PIU.
Results: The AUC for daily internet use time was 0.64 (95 % CI: 0.62 to 0.656), which was higher than the AUC for weekly physical activity (0.599; 95 % CI: 0.580 to 0.618) and daily night time sleep (0.563; 95 % CI: 0.544 to 0.582). The AUC for three indicator variables was compared, which showed that the AUC for daily internet time was significantly higher than the AUC for daily night-time sleep.
Conclusions: The assessment of daily internet use time as part of a larger battery of general health-related questions could be applied periodically among young students for screening of PIU in addition to a host of other important mental and physical health related conditions and behaviors. However, further studies are needed to determine optimal cut-off depending upon the desired trade-off between sensitivity and specificity for screening among different populations.

# Outcome

"The AUC for daily internet use time was 0.64 (95 % CI: 0.62 to 0.656), which was higher than the AUC for weekly physical activity (0.599; 95 % CI: 0.580 to 0.618) and daily night time sleep (0.563; 95 % CI: 0.544 to 0.582). The AUC for the three indicator variables was compared, which showed that the AUC for daily internet time was significantly higher than the AUC for daily night-time sleep." (Balhara et al., 2020, p. 45)
"The daily internet use time of more than or equal to 3.2 h per day (or 190 min/day) was found to be the best parameter for screening participants for PIU, having the highest sensitivity value of 74 % among the three indicator variables (specificity value of 46 %). The specificity value of 90 % was observed for daily internet use time of more than or equal to eight hours per day (or 480 min/day). However, the sensitivity at this threshold was 22 %." (Balhara et al., 2020, p. 45)